

CLAIMS

1. A telescoping slide assembly support system comprising
a telescoping slide assembly including load-carrying and stationary
slides movable relative to one another to extend and retract the load-carrying slide
5 relative to the stationary slide between fully extended and retracted positions,
a rack formed to include a series of retainer apertures, and
a quick-mount support coupled to the stationary slide including
a fixed retainer arranged to extend through a first of the retainer
apertures,
10 a movable retainer mounted for pivoting movement toward and away
from the fixed retainer about a retainer pivot axis and arranged to extend through a
second of the retainer apertures,
a pivotable actuator,
an elastic, deformable O-ring for pivotally mounting the pivotable
15 actuator about an actuator pivot axis, and
a driver coupled to the pivotable actuator and coupled to the movable
retainer to cause the movable retainer to pivot about the retainer pivot axis toward and
away from the fixed retainer in response to pivoting movement of the pivotable
actuator about the actuator pivot axis.
20
2. The system of claim 1, wherein the movable retainer includes
an arcuate slot, and the driver coupled to the pivotable actuator is arranged to move in
the arcuate slot to cause movable retainer to pivot about the retainer pivot axis in
response to pivoting movement of the pivotable actuator about the actuator pivot axis.
3. The system of claim 2, wherein the arcuate slot includes a first
25 lobe and a second lobe, the movable retainer includes a portion arranged to protrude
into the arcuate slot between the first and second lobes, the driver moves from the first
lobe into the second lobe past the protruding portion in the movable retainer as the
pivotable actuator is pivoted about the actuator pivot axis to move the movable
retainer away from the fixed retainer, and the driver moves from the second lobe into
30 the first lobe past the protruding portion in the movable retainer as the pivotable
actuator is pivoted about the actuator pivot axis to move the movable retainer toward
the fixed retainer.

4. The system of claim 3, wherein the O-ring provides means for allowing the actuator pivot axis to shift as the driver moves in the arcuate slot past the protruding portion in the movable retainer.

5. The system of claim 3, wherein the O-ring is configured to
5 compress as the driver moves past the protruding portion in the movable retainer, and then expand as the driver arrives in the first or second lobes in response to pivoting movement of the pivotable actuator.

6. The system of claim 3, wherein the amount of compression of the O-ring as the driver moves past the protruding portion in the movable retainer
10 corresponds to the height of the protruding portion.

7. The system of claim 3, wherein the protruding portion marks an over-the-center position between the first and second lobes.

8. The system of claim 3, wherein the movable retainer is arranged to move away from the fixed retainer as the driver moves in the
15 counterclockwise direction in the arcuate slot.

9. The system of claim 2, wherein the arcuate slot is boomerang-shaped.

10. The system of claim 2, wherein the O-ring is made from buna rubber.

20 11. The system of claim 2, wherein the movable retainer includes a retainer lug, a base and a mid-section interconnecting the retainer lug and the base, and the mid-section includes the arcuate slot.

12. The system of claim 11, wherein the retainer lug is configured to extend through the second of the retainer apertures and the pivotable actuator
25 pivots the movable retainer about the retainer pivot axis to the lowered and unlocked position to permit movement of the retainer lug into and out of the second of the retainer apertures during coupling and uncoupling of the quick-mount support and the rack and to the raised and locked position to mate the retainer lug and the rack to block uncoupling of the quick-mount support and the rack.

30 13. The system of claim 11, wherein the base of the movable retainer includes a pivot mount-receiving aperture for receiving a pivot mount to

mount the movable retainer for pivoting movement about the retainer pivot axis established by the pivot mount.

14. The system of claim 1, wherein the pivotable actuator includes a hub having the O-ring-receiving aperture, a driver arm cantilevered to the hub and having a driver-receiving aperture adapted to receive the driver, and a lever arm cantilevered to hub and shaped to be gripped by a user.

15. The system of claim 1, wherein the quick-mount support further includes a support bracket coupled to the stationary slide, an anchor mount coupled to the support bracket, and a pivot mount coupled to the support bracket, the fixed retainer includes an anchor mount-receiving aperture for receiving the anchor mount, the movable retainer includes a pivot mount-receiving aperture for receiving the pivot mount to mount the movable retainer for pivoting movement about the retainer pivot axis established by the pivot mount, the O-ring has an anchor mount-receiving aperture, the pivotable actuator has an O-ring-receiving aperture, the anchor mount is arranged to be received in the anchor mount-receiving aperture in the O-ring, and the O-ring is arranged to be received in the O-ring-receiving aperture in the pivotable actuator to mount the pivotable actuator for pivoting movement about the actuator pivot axis established by the anchor mount.

16. A telescoping slide assembly support system comprising a telescoping slide assembly including load-carrying and stationary slides movable relative to one another to extend and retract the load-carrying slide relative to the stationary slide between fully extended and retracted positions,

a rack formed to include a series of retainer apertures, and a quick-mount support coupled to the stationary slide including a fixed retainer arranged to extend through a first of the retainer apertures,

a movable retainer mounted for pivoting movement toward and away from the fixed retainer about a retainer pivot axis and arranged to extend through a second of the retainer apertures, the movable retainer including an arcuate slot, a pivotable actuator mounted for pivoting movement about an actuator pivot axis, and

a driver coupled to the pivotable actuator and arranged to move in the arcuate slot in the movable retainer to cause movable retainer to pivot about the retainer pivot axis toward and away from the fixed retainer in response to pivoting movement of the pivotable actuator about the actuator pivot axis.

5 17. The system of claim 16, wherein the quick-mount support further includes an anchor mount and an elastic, deformable O-ring having an anchor mount-receiving aperture, the pivotable actuator has an O-ring-receiving aperture, the anchor mount is arranged to be received in the anchor mount-receiving aperture in the O-ring, and the O-ring is arranged to be received in the O-ring-receiving aperture in
10 the pivotable actuator to mount the pivotable actuator for pivoting movement about the actuator pivot axis established by the anchor mount.

 18. The system of claim 17, wherein the arcuate slot includes a first lobe and a second lobe, the movable retainer includes a portion arranged to protrude into the arcuate slot between the first and second lobes, the driver moves from the first
15 lobe into the second lobe past the protruding portion in the movable retainer as the pivotable actuator is pivoted about the actuator pivot axis to move the movable retainer away from the fixed retainer, and the driver moves from the second lobe into the first lobe past the protruding portion in the movable retainer as the pivotable
20 actuator is pivoted about the actuator pivot axis to move the movable retainer toward the fixed retainer.

 19. The system of claim 18, wherein the O-ring is configured to compress as the driver moves past the protruding portion in the movable retainer, and then expand as the driver arrives in the first or second lobes in response to pivoting movement of the pivotable actuator.

25 20. A telescoping slide assembly support system comprising a telescoping slide assembly including load-carrying and stationary slides movable relative to one another to extend and retract the load-carrying slide relative to the stationary slide between fully extended and retracted positions,
 a rack formed to include a series of retainer apertures, and
30 a quick-mount support coupled to the stationary slide including a fixed retainer arranged to extend through a first of the retainer apertures,

a movable retainer mounted for pivoting movement toward and away from the fixed retainer about a retainer pivot axis and arranged to extend through a second of the retainer apertures, the movable retainer including an arcuate slot,

a pivotable actuator,

5 an elastic, deformable O-ring for pivotally mounting the pivotable actuator about an actuator pivot axis, and

a driver coupled to the pivotable actuator and arranged to move in the arcuate slot in the movable retainer to cause movable retainer to pivot about the retainer pivot axis toward and away from the fixed retainer in response to pivoting
10 movement of the pivotable actuator about the actuator pivot axis.

21. The system of claim 20, wherein the arcuate slot includes a first lobe and a second lobe, the movable retainer includes a portion arranged to protrude into the arcuate slot between the first and second lobes, the driver moves from the first lobe into the second lobe past the protruding portion in the movable retainer as the
15 pivotable actuator is pivoted about the actuator pivot axis to move the movable retainer away from the fixed retainer, and the driver moves from the second lobe into the first lobe past the protruding portion in the movable retainer as the pivotable actuator is pivoted about the actuator pivot axis to move the movable retainer toward the fixed retainer.

20 22. The system of claim 21, wherein the O-ring is configured to compress as the driver moves past the protruding portion in the movable retainer, and then expand as the driver arrives in the first or second lobes in response to pivoting movement of the pivotable actuator.

23. A telescoping slide assembly support system comprising
25 a telescoping slide assembly including load-carrying and stationary slides movable relative to one another to extend and retract the load-carrying slide relative to the stationary slide between fully extended and retracted positions,
a rack formed to include a series of retainer apertures, and
a quick-mount support coupled to the stationary slide including
30 a fixed retainer arranged to extend through a first of the retainer apertures,

a movable retainer mounted for pivoting movement toward and away from the fixed retainer about a retainer pivot axis and arranged to extend through a second of the retainer apertures, the movable retainer including an arcuate slot,

a pivotable actuator,

5 means for mounting the pivotable actuator for pivoting movement about an actuator pivot axis, and

a driver coupled to the pivotable actuator and arranged to move in the arcuate slot in the movable retainer to cause the movable retainer to pivot about the retainer pivot axis toward and away from the fixed retainer in response to pivoting
10 movement of the pivotable actuator about the actuator pivot axis, the mounting means allowing the actuator pivot axis to shift as the driver moves in the arcuate slot.

24. The system of claim 23, wherein the mounting means is an elastic, deformable O-ring.